TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL NASA/GODDARD SPACE FLIGHT CENTER REQUEST FOR TASK PLAN / TASK ORDER CONTRACT NO /TASK NO CONTRACTOR JOB ORDER NUMBER APPROF FY TASK NO. AMENDMENT NASS-283 99124 QSS Group, Inc. 566-258-10-19-89 2000 TASK TITLE: (NTE 80 characters; include Project name) EO-1 Backup Solid State Recorder (BSSR) Design APPROVALS: (Type or paper name and sign) ASSISTANT TECHNICAL REPRESENTATIVE (OR TASK MONITOR) 566 451 301-2867687 Irving Linares BRANCH HEAD 566 James E. Stephens 301-286-8380 TATIVE ICOTES CONTRACTING OFFICER'S TECHN Robert S. Lebair, Jr. 560 301-286-6588 FLIGHT HARDWARE, CRITICAL GSE OR SOFTWARE? CONTRACTING OFFICER'S QUALITY REP DESIGNATED FAM: 'IIF YES, NEED CODE 303 CONCURRENCE NEXT BLOCK The contractor shall identify and explain the reason for any deviations, exceptions, (To be completed by Contracting Officer) or conditional assumptions taken with respect to this Task Order or to any of the C.O. Requested Quote on: Date: technical requirements of the Task Order Statement of Work and related specifications. The contractor shall complete and submit the required Reps and Certs. Contractor will develop specification or statement of work under this task for a future procurement. Flight hardware will be shipped to GSFC for testing prior to final delivery. [] NO [] YES IXI N/A Government Furnished Property/Facilities: [] YES -- SEE LIST OF GFP (offsite only) / FACILITIES (onsite only) [X] NO Onsite Performance: [X] NO [] YES If partial, indicate onsite work in SOW by asterisk (*) Surveillance Plan Attached: IXI NO I I YES Highlighted Contract Clauses: (to be completed by Contracting Officer) Per Clause H.14, Task Ordering Procedure, subparagraph (f), the effective date of this task order shall be 5/25/00. INCENTIVE FEE STRUCTUR (check one) (See Contract NAS5-99124, Attachment K, Incentive Fee Plan) X__ No. 5 No. 4 No. 1 No. 2 No. 3 10% 10% 25% 25% Cost 50% Schedule 15% 25% 25% 50% 45% 45% 25% Technical 75% 25% 50% The target cost of this task order is \$ 622,801 12,084 The target fee of this task order is \$ The total target cost and target fee of this task order as contemplated by the Incentive Fee clause of this contract is \$ 634,885 The maximum fee is \$ 17,588 The minimum fee is \$0. AUTHORIZED SIGNATURE CONTRACT CLAUSE "TASK ASSIGNMENT ELIZABETH I. AUSTIN CONTRACTING OFFICER SIGNATURE OF CONTRACTIO CONTRACTOR'S ACCEPTANCE AUTHORIZED SIGNATURE DATE

TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL

NASA/GODDARD SPACE FLIGHT CENTER

REQUEST FOR TASK PLAN / TASK ORDER

CONTRACTOR	CONTRACT NO TASK NO.		A Committee of the Comm
	NAS5-	TASK NO.	AMENDMENT
QSS Group, Inc.	99124	283	

Applicable paragraphs from contract Statement of Work:

BACKGROUND:

The EO-1 Project has been requested to implement risk mitigation plans that resulted from the NASA Mars mission failures and consistent reliability questions regarding the Wide-Array Advanced Recorder Processor (WARP). The intent of the Backup Solid State Recorder (BSSR) is to enable the capture and downlink of minimum science from EO-1 should the WARP suffer a catastrophic failure after launch. Minimum science is defined as one full scene of either Advanced Land Imager (one channel) or Hyperion (two channels). During the concept study phase, GSFC determined that by implementing the BSSR in a single module design (utilizing the spare FODB card slot in the WARP chassis), minimal impacts to the spacecraft configuration and subsequent retest requirements would be required. Since minimizing technical risk and schedule delays are key drivers in this development a single module design was baselined.

STATEMENT OF WORK:

The contractor shall specify and design a single module Solid State Recorder that shall be used as a backup to the EO-1 WARP. The scope of work shall include performance of trade studies, recommendations regarding the most prudent approach (from a technical and schedule risk perspective), develop the card/module design and perform any supporting analyses (including breadboarding) to demonstrate that the design, when implemented, will be of low technical risk and high reliability.

The contractor shall finalize the BSSR functional and performance requirements, develop an EO-1 compliant design and present this design in a Critical Design Review, no later than 7/15/00. The contractor shall respond to any resulting action items and be prepared to implement the design if accepted and authorized (under a separate task) by GSFC/EO-1 Project. In addition, any long lead material or parts required to maintain a minimum-schedule development shall be identified.

The attached BSSR ICD/Performance Specification should be used as a starting point for this task. It is recognized that the contractor will participate in the refinement of this specification and present the recommended requirements to GSFC for approval (via a peer review).

The contractor is strongly encouraged to make use of all existing material, both at the contractor's facility and at GSFC (resident on various programs) in order to mitigate any schedule risk associated with parts procurement.

PERFORMANCE SPECIFICATIONS:

<u>Program Schedule</u>: Provide sufficient detail to track all engineering and manufacturing activities on a weekly basis.

<u>Peer Review</u>: Shall contain sufficient detail to clearly define and finalize all BSSR performance and interface requirements.

<u>CDR</u>: Shall address detailed electrical design, mechanical design, parts procurement status, verification plan, environmental test plan, and program risk evaluation. The CDR shall show that the BSSR is compliant with EO-1 spacecraft contamination and reliability requirements and WARP mechanical interface constraints.

APPLICABLE DOCUMENTS:

BSSR ICD/Performance Specification

TASK END DATE: 7/31/00	
MILESTONES/DELIVERABLES AND DATES:	
1. Program Schedule	5/31/00
2. Final Draft of BSSR Performance Specification	5/26/00
3. Inputs to Peer Review (including design trades,	5/26/00
risk factors, parts status, CCA area studies, etc.)	
Conduct Peer Review	5/31/00
5. Completion of Impedance Matching Test	- 7/1/00 by CDR
6. Inputs to Critical Design Review	7/10/00
7. Conduct CDR	7/15/00
8. Response to CDR Action Items	7/31/00
PERFORMANCE STANDARDS:	
Schedule: On-time delivery/completion of	of the above deliverables/milestones

Technical: ATR's acceptance of the above FINAL DELIVERY DESTINATION (NAME, BLDG, ROOM):

Irving Linares, building 12, room N202